

CLEAN OHIO CONSERVATION FUND

THE OHIO PUBLIC WORKS COMMISSION
65 EAST STATE STREET, SUITE 312
COLUMBUS, OHIO 43215
(614) 466-0880
www.pwc.state.oh.us

GLOSSARY OF TERMS FOR CLEAN OHIO CONSERVATION FUND APPLICATION AND METHODOLOGY

October 2001

**GLOSSARY OF TERMS FOR CLEAN OHIO
GRANT APPLICATION & MODEL METHODOLOGY**

Aesthetically pleasing and ecologically informed design

Design which protects existing or restored habitats by avoiding sensitive areas, by setting back construction and paved surfaces from streams, wetlands and other sensitive habitats, by landscaping in order to create balanced natural ecosystems, by constructing facilities and amenities which visually enhance the natural setting. The result of such design is a healthy environment and a superior recreational experience, which inform, educates and pleases participants.

Aquatic biological communities

Those native plants and animals, which reside in wetlands, streams and lakes. The potential diversity of aquatic communities is defined by the use designation of the stream and/or the classification of the wetland as defined by the Ohio Environmental Protection Agency and by the Ohio Department of Natural Resources.

Areas of relatively high unemployment

A municipal corporation that has a population of at least fifty thousand or a county, that the average rate of unemployment, during the most recent five-year period for which data are available, is equal to at least one hundred and twenty-five per cent of the average rate of unemployment for the United States for the same period. [ORC Sec. 122.16]

Balanced natural ecosystems

Ecological systems are dynamic assemblages of native plant and/or animal communities that (1) occur together on the landscape or in the water; and (2) are tied together by similar ecological processes (e.g., fire, hydrology), underlying environmental features (e.g., soils, geology) or environmental gradients (e.g., elevation).

Comprehensive open space planning

A plan adopted by a subdivision of the state that identifies community goals related to open space preservation and utilization. The plan may include recreational and environmental goals, zoning definitions and requirements for planned unit developments where applicable, maps that identify targeted resources, funding strategies and time lines.

Connecting corridor for natural areas

Corridors are an attempt to compensate for habitat fragmentation by connecting similar areas to allow species to migrate between suitable habitats. Corridors should be as wide as possible to avoid "edge effects" (The outer boundaries of any habitat consist of a zone of influences such as wind, sunlight, water tables that differ from the interior).

Conservation organization

Community and civic organizations which represent the interests of

citizens who are concerned with the sustainability of the natural environment and the preservation of native natural habitats and communities including the air, water and land necessary to sustain them.

Easement

"Conservation easement" means an incorporeal right or interest in land that is held for the public purpose of retaining land, water, or wetland areas predominantly in their natural, scenic, open, or wooded condition, including, without limitation, the use of land in agriculture when consistent with and in furtherance of the purpose of retaining those areas in such a condition, or retaining their use predominantly as suitable habitat for fish, plants, or wildlife; that imposes any limitations on the use or development of the areas that are appropriate at the time of creation of the conservation easement to achieve one or more of those purposes; and that includes appropriate provisions for the holder to enter the property subject to the easement at reasonable times to ensure compliance with its provisions. [ORC 5301.67 (A)] Easements are entered into on a volunteer basis, and are compensated at whatever rate is agreed to among the parties given the value of the restrictions. Easements are permanent in nature and are to be recorded as a deed restriction.

Ecotourism

Forms of tourism, which avoids adverse environmental consequences to core ecological areas while contributing to diverse local economies. Ecotourism emphasizes the interpretation of local ecosystems and culture by trained guides; minimal-impact visitation; commitment to local conservation issues; and direct benefits to local people. Ecotourism operations that are owned and run by local people tend to offer the most authentic cultural immersion and provide the most significant local benefits. [The Ecological Society, www.conservationeconomy.net].

Endangered species

According to U.S. Federal law, a species is endangered if it is in imminent danger of extinction throughout all or a significant portion of its range.

Facilities

Constructed features that are necessary to make an open space area accessible and useable such as parking places at a canoe launch, restrooms at a natural area trail head or a boardwalk at a wetland. The preservation of the natural area, or riparian corridor must be the main focus of the project, not the facility. Active recreation facilities such as tennis courts and rec centers are funded by other grant programs.

Fee simple land acquisition

A fee without limitation to any class of heirs or restrictions on transfer of ownership [Webster=s collegiate dictionary]

Streamside forest functions

Are those colonies of native shrubs and trees, which protect water quality and in stream and riparian habitat by allowing the succession of native plants. These forests provide habitat for wide variety of plants and animals from upland species to aquatic communities. Also, they minimize sedimentation from bank erosion and pollutant migration from stormwater runoff. In addition, they provide shade to in stream species; this is especially critical to those species, which are intolerant to heat extremes.

Functioning floodplains

Are those riparian lands adjacent to the stream, which are accessible to stormwater and floodwaters? Functioning flood plains disperse and retain peak flows, minimize downstream flooding and provide a settling basin for sediment and other pollutants carried by stormwater. Any development in flood plains should accommodate these functions by avoidance and minimization, especially of impervious surfaces.

Globally endangered biological community/Globally endangered species

The Natural Heritage Global Ranking system is as follows:

- G1: Critically imperiled globally (5 or fewer viable populations known)
- G2: Imperiled globally (6-20 viable populations known)
- G3: Either very rare or local throughout its range or found locally in a restricted range (21-100 viable populations known)
- G4: Apparently secure globally
- G5: Demonstrably secure globally
- GH: Of historical occurrence throughout range
- GU: Possibly in peril range-wide but status uncertain

Habitat for rare, threatened and endangered species

USFW has developed a Habitat Suitability Index (HIS) to compare a habitat against an "ideal" optimal habitat

Habitat protection

Management focus that de-emphasizes individual species, focusing instead on maintaining habitat or ecosystem quality, including ecological processes important in maintaining the characteristic biodiversity of an area.

Headwater streams

Headwater streams are the small swales, creeks and streams that are the origin of most rivers. These small streams join together to form larger streams and rivers or run directly into larger streams and lakes. Ohio

EPA defines a headwater stream as a stream with a watershed less than or equal to 20 square miles. Many streams and drainage ways have a watershed of less than one square mile. We refer to these as **A primary headwater@** streams. (OEPA definition)

High quality wetlands

Ohio EPA wetland classification III:

(a) Wetlands assigned to category 3 support superior habitat, or hydrological or recreational functions as determined by an appropriate wetland evaluation methodology acceptable to the director or his authorized representative.

(b) Wetlands assigned to category 3 may be typified by some or all of the following characteristics: high levels of diversity, a high proportion of native species, or high functional values.

(c) Wetlands assigned to category 3 may include, but are not limited to: wetlands which contain or provide habitat for threatened or endangered species; high quality forested wetlands, including old growth forested wetlands, and mature forested riparian wetlands; vernal pools; and wetlands which are scarce regionally and/or statewide including, but not limited to, bogs and fens. [OAC 3745-1-54].

High quality, viable habitat for plant or animal species

USFW has developed a Habitat Suitability Index (HSI) to compare a habitat against an "ideal" optimal habitat (more for fish & wildlife than plants)

Hydromodification

Hydromodification activities are man made or engineered modifications of natural drainage or streams, and are separated into categories: drainage systems, channelization and channel modification, dams, and stream bank and shoreline erosion. [U.S. EPA definition, <http://www.epa.gov/OWOW/NPS/MMGI/hydro.html>]. Does not include restoring natural stream or drainage conditions.

Natural areas

"Natural area" means an area of land or water which either retains to some degree or has re-established its natural character, although it need not be completely undisturbed, or has unusual flora, fauna, geological, archeological, scenic, or similar features of scientific or educational interest. [ORC 1517.01 (A)]

Natural features

A physical or biological feature of the landscape which has resulted from and is maintained by natural processes. Examples: waterfall, river oxbow, gorge, natural bridge, cave, etc. [ODNR, Div. Of Natural Areas & Preserves]

Natural heritage

All the species, communities and physical features present in Ohio at the time of the first European settlement. [ODNR, Div. Of Natural Areas & Preserves]

Natural stream channels

Are those, which provide for the normal fluvial morphology of a stream? The channel will allow for natural migration of stream sinuosity, pool and riffle formation and other in stream habitat features, and banks, which allow stormwater access to the floodplain.

Nonnative, invasive species of plants or animals

Non-native, or exotic, species are plants or animals that are introduced to a new area artificially. A non-native species can become invasive if it reproduces so successfully in the new area that it dominates the native species present. (Meffe & Carroll, Principles of Conservation Biology)

Open space

Any area of land the preservation of which would 1) maintain and enhance the conservation of natural or scenic resources; 2) protect natural streams or water supply; 3) promote conservation of wetlands, marshes, bogs, fens, forests, prairies, lakes, streams or other naturally occurring communities; 4) enhance the value to the public of abutting or neighboring parks, stream corridors, forests, wildlife areas, natural areas or other natural open spaces; 5) enhance passive public recreation opportunities.

Reforestation

To place a parcel of land back into forested condition. [Webster=s Collegiate Dictionary]

Restores streamside forests

Restoration ecology is the process of using ecological principles and experience to return a degraded ecological system to its former or original state. [Meffe & Carroll, Principles of Conservation Biology]

Riparian corridors

Riparian ecosystems are ecosystems with a high water table because of proximity to an aquatic ecosystem or subsurface water. They usually occur as an ecozone between aquatic and upland ecosystems but have distinct vegetation and soil characteristics. They are uniquely characterized by the combination of high species diversity, high species density, and high productivity. Continuous interactions occur between riparian, aquatic, and upland terrestrial ecosystems through exchange of energy, nutrients, and species. (Mitsch, William J., Wetlands)

State natural heritage inventory endangered/rare/threatened species

Managed by the Division of Natural Areas and Preserves at the Ohio Department of Natural Resources, the Natural Heritage State Ranking system is as follows:

S1: Critically imperiled in state (5 or fewer viable populations known)

S2: Imperiled in state because of rarity or vulnerability (6-20 viable populations known)

S3: Rare or uncommon in state (21-100 viable populations known)

S4: Apparently secure in state

S5: Demonstrably secure in state

SH: Of historical occurrence throughout range

SU: Possibly in peril range-wide but status uncertain

According to Ohio Revised Code 1518 (Ohio Endangered Plant Law)

Endangered: A native Ohio plant species may be designated endangered if, based on its known status in Ohio, one or more of the following criteria applies:

- 1) The species is a federal endangered species extant in Ohio
- 2) The natural population of the species in Ohio are limited to 3 or fewer occurrences
- 3) The distribution of the natural populations of the species in Ohio is limited to a geographic area delineated by 3 or fewer USGS 7.5 minute quadrangle maps
- 4) The total number of plants in all the natural populations of the species in Ohio is limited to one hundred or fewer individual, physically unconnected plants.

Threatened: A native Ohio plant species may be designated threatened if, based on its known status in Ohio, one or more of the following criteria appears:

- 1) The species is a federal threatened species extant in Ohio but not on the state endangered species list.
- 2) The natural populations of the species in Ohio are limited to no less than 4 nor more than 10 occurrences
- 3) The distribution of the natural populations of the species in Ohio is limited to a geographic area delineated by no less than 4 nor more than 7 USGS 7.5 minute quadrangle maps.

Vegetative filters or buffers

Vegetative filtration buffers and wetlands remove organic and inorganic nutrients and toxic materials in the following ways:

A reduction in velocity causes sediments and chemicals attached to sediment particles to drop to the bottom and be trapped among the stems and roots;

A variety of anaerobic and aerobic processes remove certain chemicals from the water;

The high rate of production of many vegetative filters or wetlands can lead to high rates of mineral uptake by vegetation and subsequent burial in sediment when vegetation dies;

A diversity of decomposers in wetland sediment (Mitsch, William J., Wetlands)

Viable population (of rare or endangered species)

Viability indicates the ability of a conservation target to persist for many generations or over long time periods.

Water quality

Is the chemical, physical and biological condition of a wetland, stream or lake? The State of Ohio sets criteria for water quality in OAC 3745-1-05 (Criteria as applicable to all waters).

Waters of the state

All streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, irrigation systems, drainage systems, and other bodies or accumulations of water, surface and underground, natural or artificial, regardless of the depth of the strata in which underground water is located, that are situated wholly or partly within, or border upon, this state, or are within its jurisdiction, except those private waters that do not combine or effect a junction with natural surface or underground waters. [ORC 6111.01 (H)]

Watersheds

A watershed is the total land area from which water drains into a single stream, lake, or ocean.

Wetlands

The term "wetlands" means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas [US Army Corps of Engineers]